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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,542	08/22/2003	Junichi Hasegawa	241853US8	8111
22850	7590	03/31/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			ULLAH, AKM E	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/645,542	Applicant(s) HASEGAWA ET AL.	
	Examiner Akm Enayet Ullah	Art Unit 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

Detailed Action

Applicant cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Status of the Application

Claims 1- 9 are pending in this application.

If applicant is aware of any prior art or any other co- pending application not already of record, he/she is reminded of his/her duty under 37 CFR 1.56 to disclose the same.

If applicant provides prior art, he/she is requested to cite it on form PTO-1449 in accordance with the guideline set forth in MPEP 609.

Drawings

This application has been filed on August 22, 2003 with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Note that figures 9 –11 requires to level as a "prior art".

Claimed Foreign Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 7 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Inoue et al (USP NO. 6,304,687).

Inoue et al disclose an optical module comprising a planar lightwave circuit chip comprising as follows:

- ***a substrate and a waveguide forming region located on substrate***
- ***a plurality of lids installed along a edge surface of planar lightwave circuit chip***
- ***an optical fiber array connected to planar lightwave circuit chip***
- ***Regarding claims 2 and 3, wherein plurality of leads are installed along each of the opposed edges of the planar lightwave circuit chip and at each four corner of the planar lightwave circuit chip are mentioned in columns 11-12, last paragraph and the first paragraph of the reference respectively.***
- ***Regarding claim 7, wherein waveguide-forming region is a circuit of an arrayed waveguide grating mentioned in throughout the reference. For an example see ninth embodiment of the reference (col.12, last paragraph).***
- ***For details see figures 19-21 and in columns 11-12.***

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4-5 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (USPNO. 6,304,687).

Inoue et al disclose an optical module comprising a planar lightwave circuit chip comprising as follows:

- ***a substrate and a waveguide forming region located on substrate***
- ***a plurality of lids installed along a edge surface of planar lightwave circuit chip***
- ***an optical fiber array connected to planar lightwave circuit chip***

- ***Regarding claim 2, wherein a plurality of leads are installed along each of the opposed edges of the planar lightwave circuit chip and at each four corner of the planar lightwave circuit chip are mentioned in columns 11-12, last paragraph and first paragraph of the reference respectively.***
- ***Regarding claim 7, wherein waveguide-forming region is a circuit of an arrayed waveguide grating mentioned in throughout the reference. For an example see ninth embodiment of the reference (col.12, last paragraph).***
- ***For details see figures 19-21 and in columns 11-12.***

Reference Inoue et al does not explicitly disclose the limitation as follows:

Regarding claims 4 and 5

4. The optical module according to claim 2 or 3, wherein said lids are installed and fixed to said planar lightwave circuit chip so that the edge surface of said lids and the edge surface of said planar lightwave circuit chip are on the same plane, and said edge surfaces of said lids and said planar lightwave circuit chip are polished together.

5. The optical module according to claim 1 or 2, wherein at least one of said plurality of lids is installed on a place where an optical waveguide to which said optical fiber array is connected is installed in said waveguide forming region.

Regarding claims 8 and 9

8. The optical module according to claim 2, wherein said two opposed edges of said planar lightwave circuit chip are an edge of an optical input side and an edge of an optical output side, and a plurality of lids are installed with the predetermined distance.

9. The optical module according to claim 8, further comprising a temperature control apparatus which adjusts temperature of said planar lightwave circuit chip contained in a package.

Columns 11-12 is the evidence that ordinary skill in the art would have found a reason, suggestion or motivation to installed the lids and fixed to PLC and temperature control apparatus to adjusts temperature of planar lightwave circuit (PLC) as claimed in claims 4-5 and 8-9 since the lids are disposed on a surface (col.11, line 50-55) in the reference.

Furthermore applicant has not described this limitation as being critical or as yielding unexpected benefits. Certainly a person of ordinary skill in the art would find it beneficial to install the lids and fixed along with PLC and adjust the temperature of PLC.

Objection to Claim, Allowable Subject Matter

Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Cited Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kakiii et al. (USPNO. 5,719,978), Epitiaux et al (USP NO. 6,864,553), Ishida (USPub. No. 2003/0103729), Bhardwaj et al (US Pub. No. 2003/0156789) and Lam et

Art Unit: 2874

al (USP NO. 6,823,103) are also cited to show a typical optical module along with planar lightwave circuit, optical fiber array, an arrayed waveguide grating temperature control apparatus and lids respectively.

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akm Enayet Ullah whose telephone number is 571-272-2361. The examiners can normally be reached on Monday through Wednesday from 5:30 am to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick, can be reached on Monday through Friday whose telephone number is 571-272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/645,542
Art Unit: 2874

Page 8


Akm Enayet Ullah
Primary Examiner
Art Unit 2874

Aullah

March 23, 2005